U.S. DEPARTMENT
Patent and T

SEARCH REQUEST FORM 2740

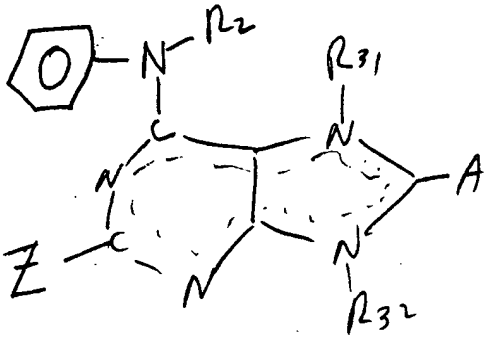
Requestor's Name: BERCH

Serial Number: 09/051827

Date: 4/7/00 Phone: 306 4720 Art Unit: 1625

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).

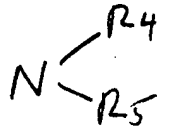


$R_2 = H$, $-C(=O)-N$

One of R_{31}, R_{32} = H; other is H, C_{1-4} alkyl,

$C_{1-4}-Q$ or 

chain $Q = H, OH, OC_{1-4}$ alkyl, $-N(H/C)(H/C)$

$Z =$  or -Hal or $-O-C(=O)-C$ or $-O-S(=O)(=O)-C$

$R_4 = H/O/N/C$

$R_5 =$ N/O/C ~~not in a ring~~ but exclude $R_5 = CH_3$

$A = H/CH_3$

Point of Contact:
Mary Hale
Technical Info. Specialist
CM1 12D16 Tel: 303-4258

1043
10:30

390.51
391.32

STAFF USE ONLY

Date completed: 4/11/00

Searcher: Mary

Terminal time: _____

Elapsed time: _____

CPU time: _____

Total time: 13

Number of Searches: _____

Number of Databases: _____

Search Site

_____ STIC

_____ CM-1

_____ Pre-S

Type of Search

_____ N.A. Sequence

_____ A.A. Sequence

1 Structure

_____ Bibliographic

Vendors

_____ IG

391.32 STN

_____ Dialog

_____ APS

_____ Geninfo

_____ SDC

_____ DARC/Questel

_____ Other

530 (9-90)

CO IN U.S. DOLLARS

LL ESTIMATED COST

	SINCE FILE ENTRY	TOTAL SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.78	-30.05

Beach
051827

FILE 'REGISTRY' ENTERED AT 10:30:27 ON 11 APR 2000
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 10 APR 2000 HIGHEST RN 261529-72-0
DICTIONARY FILE UPDATES: 10 APR 2000 HIGHEST RN 261529-72-0

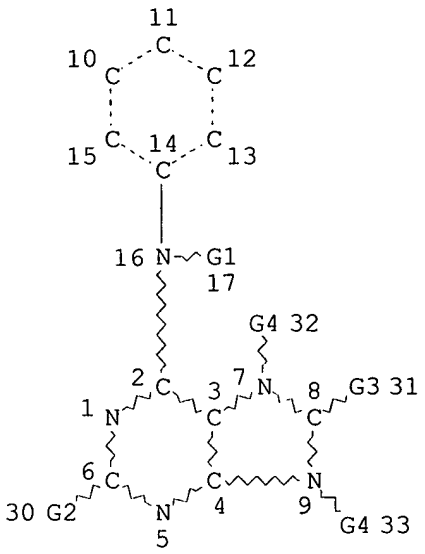
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 11, 2000

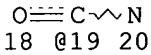
Please note that search-term pricing does apply when conducting SmartSELECT searches.

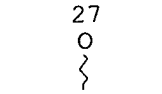
Structure search limits have been increased. See HELP SLIMIT for details.

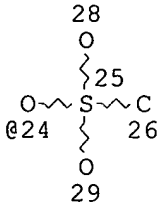
=> d l6 que stat;d 1-39 ide cbib abs

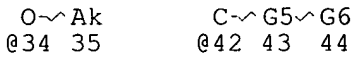
L4 STR











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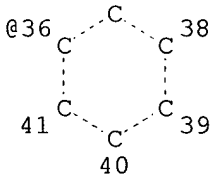

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VAR G3=H/ME
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REP G5=(0-3) C
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 44

STEREO ATTRIBUTES: NONE
L6 39 SEA FILE=REGISTRY SSS FUL L4

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SEARCH TIME: 00.00.01

L6 ANSWER 1 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 204633-49-8 REGISTRY
CN 1H-Purin-6-amine, N-(4-butoxyphenyl)-2-chloro- (9CI) (CA INDEX NAME)
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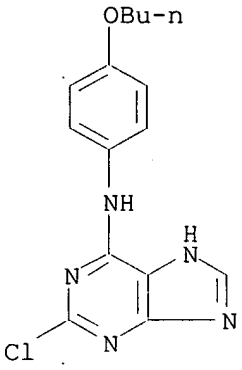
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:230182 Solution-phase synthesis of 2,6,9-trisubstituted purines. Fiorini, Maria T.; Abell, Chris (University Chemical Laboratory, Cambridge, CB2 IEW, UK). Tetrahedron Lett., 39(13), 1827-1830 (English) 1998. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

AB A simple three-step method for the soln.-phase combinatorial synthesis of 2,6,9-trisubstituted purines from 2,6-dichloropurine is described. The synthesis exploits the use of resin capture to remove excess reagent used in the final step.

L6 ANSWER 2 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 204633-45-4 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)
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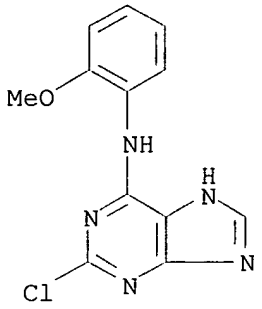
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:230182 Solution-phase synthesis of 2,6,9-trisubstituted purines. Fiorini, Maria T.; Abell, Chris (University Chemical Laboratory, Cambridge, CB2 IEW, UK). Tetrahedron Lett., 39(13), 1827-1830 (English) 1998. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

AB A simple three-step method for the soln.-phase combinatorial synthesis of 2,6,9-trisubstituted purines from 2,6-dichloropurine is described. The synthesis exploits the use of resin capture to remove excess reagent used in the final step.

L6 ANSWER 3 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 204633-44-3 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)
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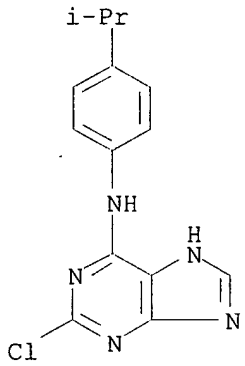
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:230182 Solution-phase synthesis of 2,6,9-trisubstituted purines. Fiorini, Maria T.; Abell, Chris (University Chemical Laboratory, Cambridge, CB2 IEW, UK). Tetrahedron Lett., 39(13), 1827-1830 (English) 1998. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

AB A simple three-step method for the soln.-phase combinatorial synthesis of 2,6,9-trisubstituted purines from 2,6-dichloropurine is described. The synthesis exploits the use of resin capture to remove excess reagent used in the final step.

L6 ANSWER 4 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 204633-43-2 REGISTRY
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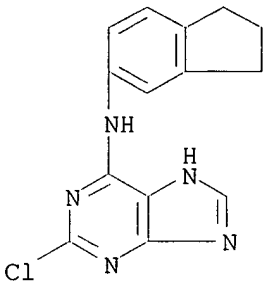
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 128:230182 Solution-phase synthesis of 2,6,9-trisubstituted purines. Fiorini, Maria T.; Abell, Chris (University Chemical Laboratory, Cambridge, CB2 IEW, UK). Tetrahedron Lett., 39(13), 1827-1830 (English) 1998. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..
AB A simple three-step method for the soln.-phase combinatorial synthesis of 2,6,9-trisubstituted purines from 2,6-dichloropurine is described. The synthesis exploits the use of resin capture to remove excess reagent used in the final step.

L6 ANSWER 5 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190655-08-4 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-[4-chloro-3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)
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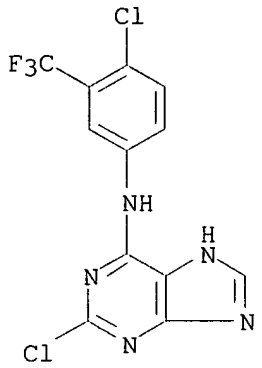
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

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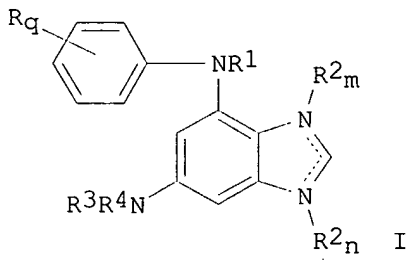

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 6 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190655-06-2 REGISTRY
CN 1H-Purin-6-amine, N-[3,5-bis(trifluoromethyl)phenyl]-2-chloro- (9CI) (CA INDEX NAME)
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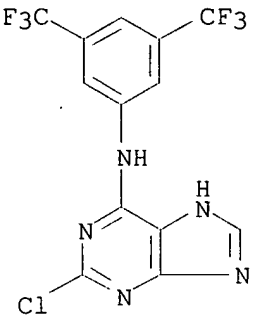
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

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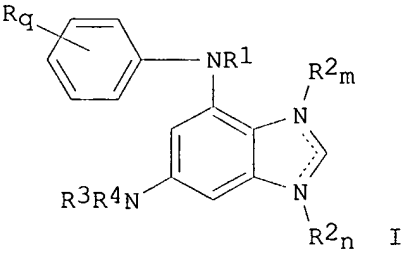

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic

radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 7 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-98-9 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)
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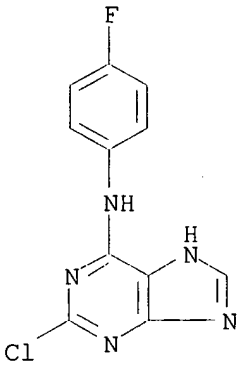
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.
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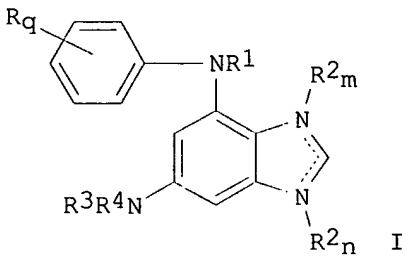

I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 8 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-96-7 REGISTRY
CN Benzonitrile, 3-[(2-chloro-1H-purin-6-yl)amino]- (9CI) (CA INDEX NAME)
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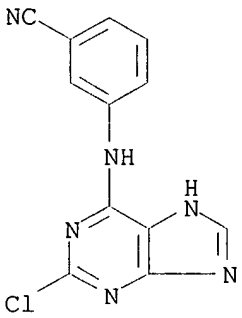
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT,

BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

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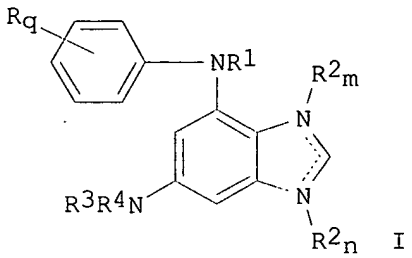
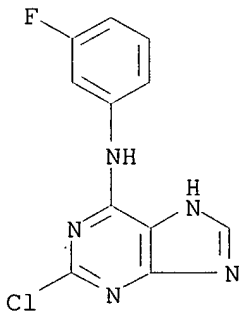


I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 9 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-94-5 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(3-fluorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H7 Cl F N5
SR CA
LC STN Files: CA, CAPLUS



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

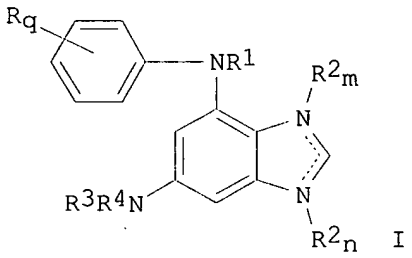
REFERENCE 1: 128:230182 Solution-phase synthesis of 2,6,9-trisubstituted

purines. Fiorini, Maria T.; Abell, Chris (University Chemical Laboratory,
Cambridge, CB2 IEW, UK). Tetrahedron Lett., 39(13), 1827-1830 (English) 1998. CODEN: TELEAY. ISSN: 0040-4039. Publisher: Elsevier Science Ltd..

AB A simple three-step method for the soln.-phase combinatorial synthesis of 2,6,9-trisubstituted purines from 2,6-dichloropurine is described. The synthesis exploits the use of resin capture to remove excess reagent used in the final step.

REFERENCE 2: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag,
Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH
1996-2213 19960910.

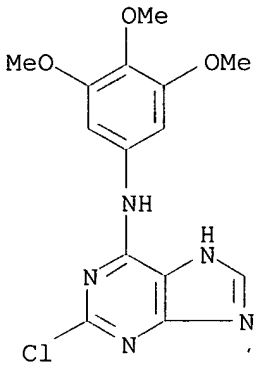
GI



I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus,
2-chloro-6-(3-chlorophenylamino)-9-ethyl-
9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

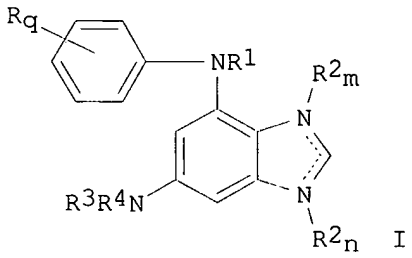
L6 ANSWER 10 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-92-3 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H14 Cl N5 O3
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

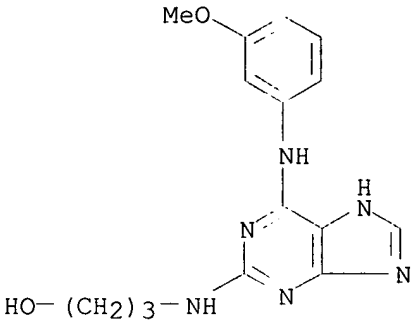
GI



AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give

2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

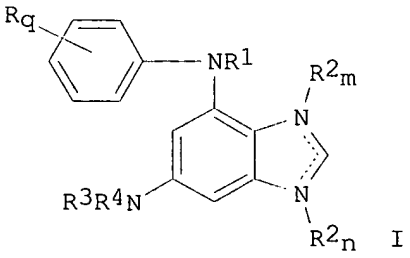
L6 ANSWER 11 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-90-1 REGISTRY
CN 1-Propanol, 3-[[6-[(3-methoxyphenyl)amino]-1H-purin-2-yl]amino]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H18 N6 O2
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

GI

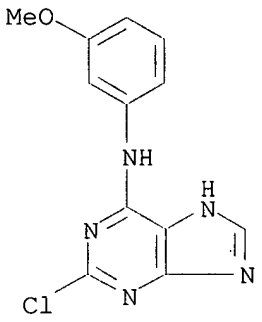


I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino,

OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 12 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-89-8 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H10 Cl N5 O
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

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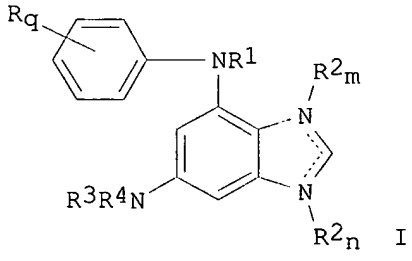
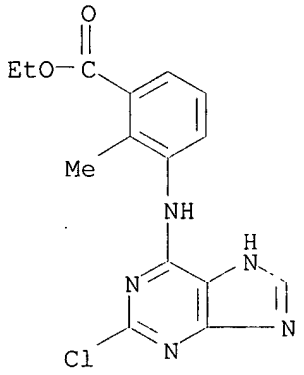


I

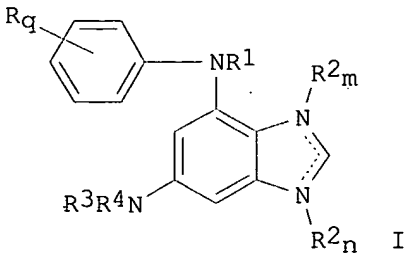
AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 13 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-88-7 REGISTRY
CN Benzoic acid, 3-[(2-chloro-1H-purin-6-yl)amino]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H14 Cl N5 O2
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

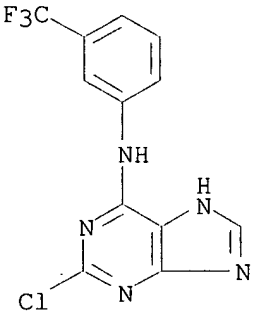
REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.
GI



I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

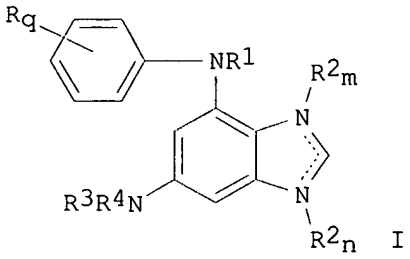
L6 ANSWER 14 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-85-4 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H7 Cl F3 N5
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI,

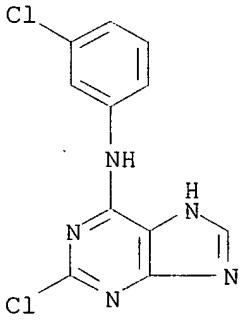
SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH
1996-2213 19960910.
GI



I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 15 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 190654-76-3 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(3-chlorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H7 Cl2 N5
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

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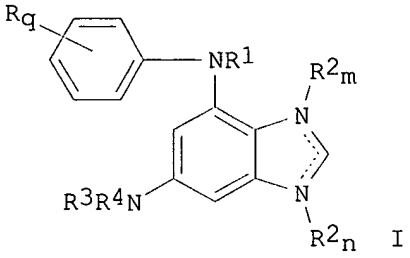
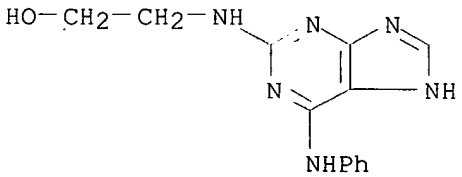


I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

L6 ANSWER 16 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 185409-07-8 REGISTRY
CN Ethanol, 2-[[6-(phenylamino)-1H-purin-2-yl]amino]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H14 N6 O
SR CA
LC STN Files: CA, CAPLUS

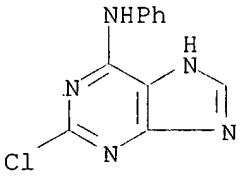


1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:74664 Facile Preparation of 2,6-Disubstituted Purines Using
Solid-Phase Chemistry. Nugiel, David A.; Cornelius, Lyndon A. M.; Corbett, Jeffrey W. (DuPont Merck Pharmaceutical Company, Wilmington, DE, 19880-0500, USA). J. Org. Chem., 62(1), 201-203 (English) 1997. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.
AB A solid-phase approach to the prepn. of novel 2,6-disubstituted purines is
presented. 2,6-Dichloropurine was loaded onto a THP linked solid support through the N-9 nitrogen. Displacement of the 6-chloro position was accomplished using excess amine at 80.degree. in n-butanol. The 2-chloro position required more forcing conditions and was displaced using an amine
as solvent at 150 .degree.C. The final products were cleaved from the resin to give the desired targets in 85-95% crude yield. Various primary and secondary amines, anilines and sulfonamides could be introduced at the
6-position of purine and subsequently modified at the 2-position. This approach was used to prep. olomoucine, a selective p33cdk2/cyclin A inhibitor, in three steps and 60% overall yield.

L6 ANSWER 17 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 185408-97-3 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-phenyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H8 Cl N5
SR CA
LC STN Files: CA, CAPLUS

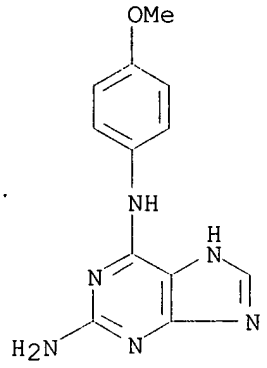


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 126:74664 Facile Preparation of 2,6-Disubstituted Purines Using
Solid-Phase Chemistry. Nugiel, David A.; Cornelius, Lyndon A. M.; Corbett, Jeffrey W. (DuPont Merck Pharmaceutical Company, Wilmington, DE, 19880-0500, USA). J. Org. Chem., 62(1), 201-203 (English) 1997. CODEN: JOCEAH. ISSN: 0022-3263. Publisher: American Chemical Society.
AB A solid-phase approach to the prepn. of novel 2,6-disubstituted purines is
presented. 2,6-Dichloropurine was loaded onto a THP linked solid support through the N-9 nitrogen. Displacement of the 6-chloro position was accomplished using excess amine at 80.degree. in n-butanol. The 2-chloro position required more forcing conditions and was displaced using an amine
as solvent at 150 .degree.C. The final products were cleaved from the resin to give the desired targets in 85-95% crude yield. Various primary and secondary amines, anilines and sulfonamides could be introduced at the
6-position of purine and subsequently modified at the 2-position. This

approach was used to prep. olomoucine, a selective p33cdk2/cyclin A inhibitor, in three steps and 60% overall yield.

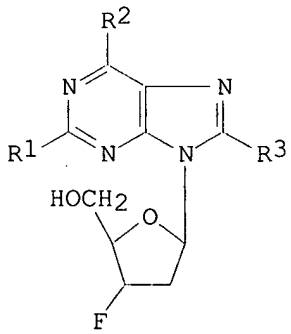
L6 ANSWER 18 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 151644-04-1 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H12 N6 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:29465 Preparation of (2',3'-dideoxy-3'-.beta.-D-erythropentofuranosyl)-9H-purines as antiviral nucleosides. Burns, Charlene Louise; Koszalka, George Walter; Krenitsky, Thomas Anthony (Wellcome Foundation Ltd., UK). PCT Int. Appl. WO 9314103 A1 19930722, 94 pp. DESIGNATED STATES: RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1993-GB4 19930105. PRIORITY: GB 1992-149 19920106; GB 1992-20317 19920925.

GI

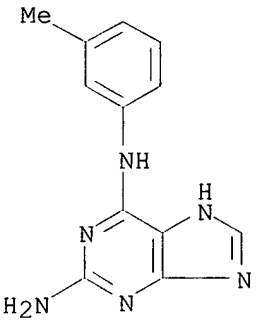


I

AB Title compds. I [R1 = H, amino, halo; R2 = halo; NR4R5, R4, R5 = H, C1-4 hydroxyalkyl, C1-6 alkyl, C3-6 cycloalkyl, C2-6 alkenyl, C6-10 aryl, (un)substituted C6-10arylC1-3alkyl, etc.; R6O(Ar)(CH2)n (R6 = C1-6 alkyl, Ar = C6-10 aryl, n = 0-3); R4R5 = N of a 3 to 7-membered heterocyclic ring

optionally contg. 1 or more other hetero atoms selected from O, N, S; S(O)nR7, n = 0-2, R7 = C1-6 alkyl, C3-6 cycloalkyl, etc.; OR8, R8 = H, C1-6 alkyl, C3-6 cycloalkyl, etc.; R3 = H, amino, halo, C1-6 alkyl with proviso] were prepd. as antiviral nucleosides. Thus, 2-amino-6-dimethylamino-9H-purine and 2',3'-dideoxy-3'-fluorouridine were suspended in a potassium phosphate buffer contg. potassium azide and treated with purine nucleoside phosphorylase and thymidine phosphorylase immobilized on
DEAE cellulose to give 26% I (R1 = NH2, R2 = Me2N, R3 = H) (II). II showed an IC50 = 8.mu.M against HIV in MT4 cells. Various formulations for I are also reported.

L6 ANSWER 19 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-95-6 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(3-methylphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H12 N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)

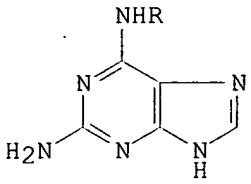


no util

2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

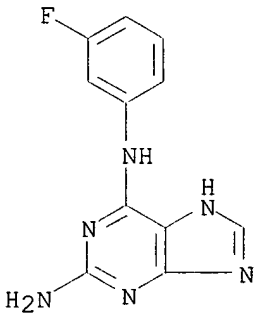
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

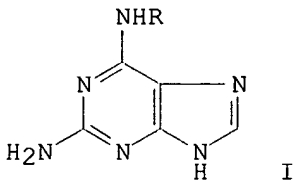
L6 ANSWER 20 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-94-5 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(3-fluorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H9 F N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

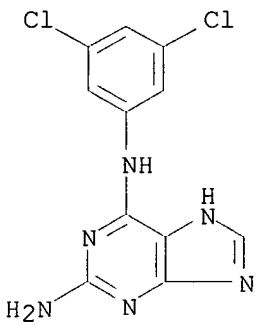
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

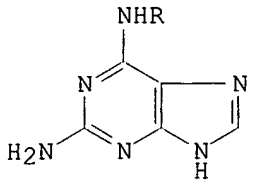
L6 ANSWER 21 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-93-4 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(3,5-dichlorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H8 Cl2 N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

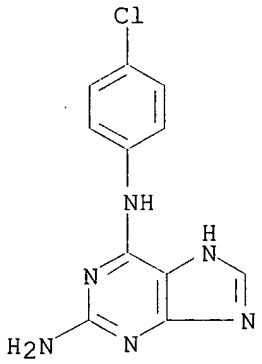
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

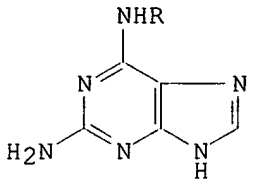
L6 ANSWER 22 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-92-3 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-chlorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H9 Cl N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

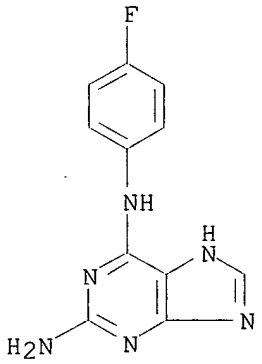
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

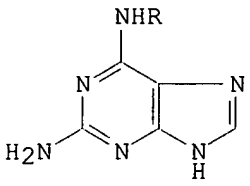
L6 ANSWER 23 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-91-2 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-fluorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H9 F N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

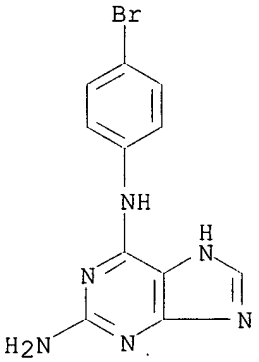
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

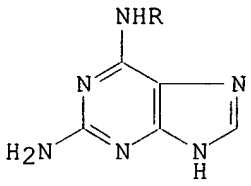
L6 ANSWER 24 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-90-1 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-bromophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H9 Br N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

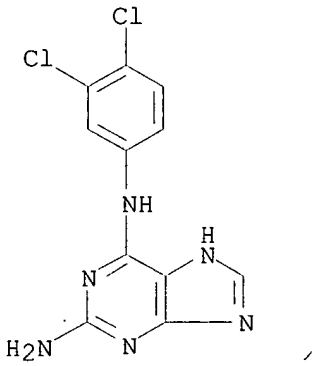
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

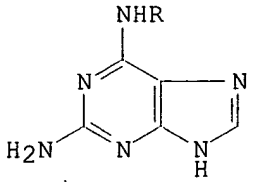
L6 ANSWER 25 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-89-8 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(3,4-dichlorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H8 Cl2 N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

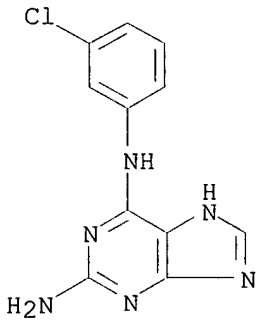
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

L6 ANSWER 26 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-88-7 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(3-chlorophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H9 Cl N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)

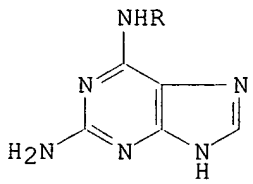


No util

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.

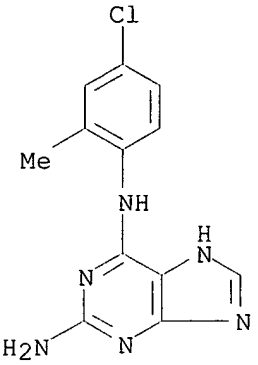
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

L6 ANSWER 27 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-87-6 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-chloro-2-methylphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H11 Cl N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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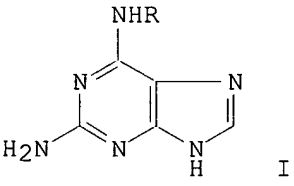
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI

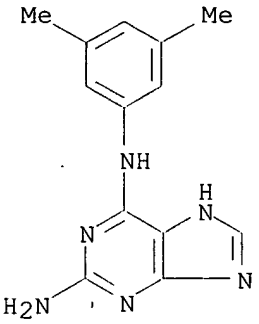


I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

L6 ANSWER 28 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-86-5 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(3,5-dimethylphenyl)- (9CI) (CA INDEX NAME)

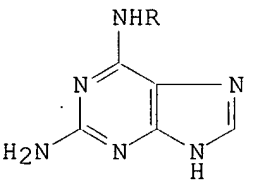
FS 3D CONCORD
MF C13 H14 N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

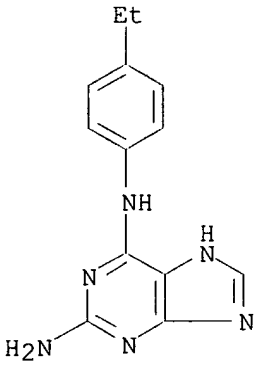
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

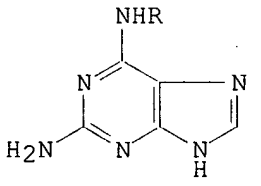
L6 ANSWER 29 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-85-4 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-ethylphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H14 N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

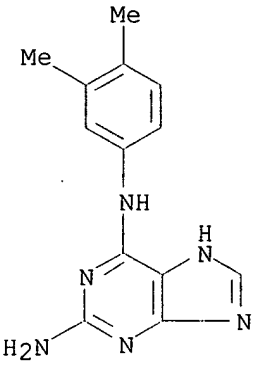
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

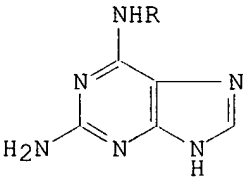
L6 ANSWER 30 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 120045-84-3 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(3,4-dimethylphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H14 N6
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)



2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

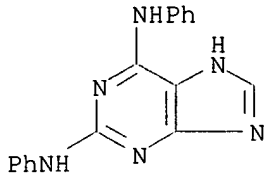
REFERENCE 2: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.
GI



I

AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

L6 ANSWER 31 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 52819-68-8 REGISTRY
CN 1H-Purine-2,6-diamine, N,N'-diphenyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2,6-Dibenzeneaminopurine
FS 3D CONCORD
MF C17 H14 N6
LC STN Files: CA, CAPLUS, TOXLIT

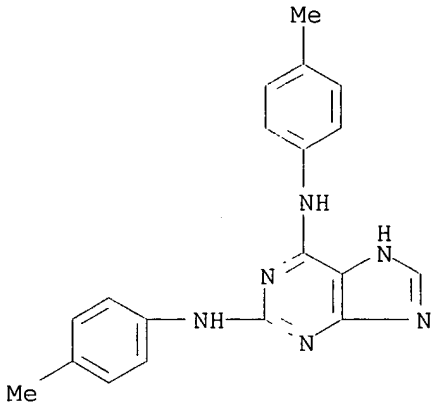


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 81:163864 Analogs of purine bases and purine metabolism in Actinomyces olivaceus. Matselyukh, B. P.; Tkachuk, Z. Yu.; Tret'yakova, G. S.; Nedel'kina, N. N. (Inst. Microbiol. Virol, Kiev, USSR). Mikrobiol.
Zh. (Kiev), 36(3), 355-7 (Ukranian) 1974. CODEN: MZUKAV.

AB When added to the incubation medium at 0.1 mg/ml, 6-mercaptopurine (I) [50-44-2], 2-mercaptoadenine [3647-48-1], 8-azaguanine [134-58-7], or 2,6-dichloropurine [5451-40-1] inhibited, whereas 6-N-acetylaminopurine [6034-68-0], 6-N-benzeneaminopurine [1210-66-8], 2,6-dibenzeneaminopurine [52819-68-8], 6-N-furfurylaminopurine [525-79-1], or 2-chloro-6-purinecarboxylic acid Et ester [52819-69-9] enhanced the growth of the A. olivaceus prototrophic strain. I was an active retroinhibitor of purine nucleotide synthesis in this strain. Purine-dependent mutants of A. olivaceus did not utilize the purine analogs.

L6 ANSWER 32 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 39639-56-0 REGISTRY
CN 1H-Purine-2,6-diamine, N,N'-bis(4-methylphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H18 N6
LC STN Files: CA, CAPLUS



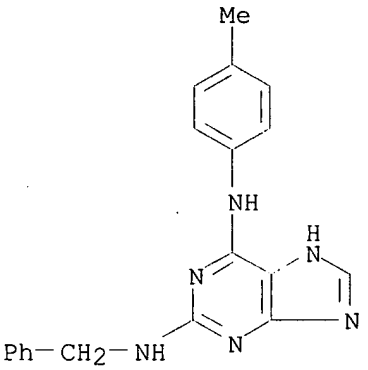
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 78:16123 Synthesis and study of 2,6-diaminopurines. Tret'yakova, G. S.; Nedel'kina, N. N.; Cherkasov, V. M. (Inst. Org. Khim.,
Kiev, USSR). Ukr. Khim. Zh. (Russ. Ed.), 38(6), 602-5 (Russian) 1972. CODEN: UKZHAU.

AB 2,6-Dichloropurine was treated with cyclohexyl-, admantyl-, and

benzylamines, and with morpholine, p-toluidine, and p-nitroaniline to replace the Cl atom in position 2. By use of more amine, disubstituted compds. were obtained using morpholine, benzylamine, and p-toluidine. The Cl atom of 6-chloro-2-benzylaminopurine was replaced by p-XC6H4NH (X = Me, NO2) and the Cl of 6-chloro-2-cyclohexylaminopurine was replaced with p-O2NC6H4NH. These compds. were prepd. as substances with possible cytokinin activity.

L6 ANSWER 33 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 39639-53-7 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-methylphenyl)-N2-(phenylmethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C19 H18 N6
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

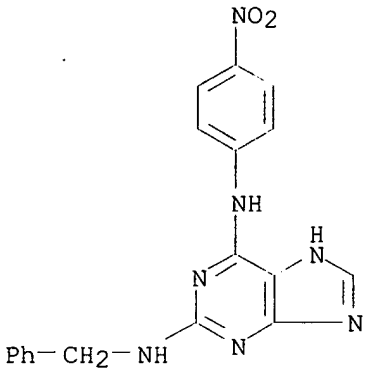


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 78:16123 Synthesis and study of 2,6-diaminopurines. Tret'yakova, G. S.; Nedel'kina, N. N.; Cherkasov, V. M. (Inst. Org. Khim., Kiev, USSR). Ukr. Khim. Zh. (Russ. Ed.), 38(6), 602-5 (Russian) 1972. CODEN: UKZHAU.
AB 2,6-Dichloropurine was treated with cyclohexyl-, admantyl-, and benzylamines, and with morpholine, p-toluidine, and p-nitroaniline to replace the Cl atom in position 2. By use of more amine, disubstituted compds. were obtained using morpholine, benzylamine, and p-toluidine. The Cl atom of 6-chloro-2-benzylaminopurine was replaced by p-XC6H4NH (X = Me, NO2) and the Cl of 6-chloro-2-cyclohexylaminopurine was replaced with p-O2NC6H4NH. These compds. were prepd. as substances with possible cytokinin activity.

L6 ANSWER 34 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 39639-52-6 REGISTRY
CN 1H-Purine-2,6-diamine, N6-(4-nitrophenyl)-N2-(phenylmethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C18 H15 N7 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

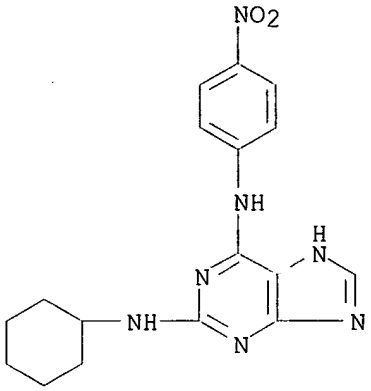


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 78:16123 Synthesis and study of 2,6-diaminopurines. Tret'yakova, G. S.; Nedel'kina, N. N.; Cherkasov, V. M. (Inst. Org. Khim., Kiev, USSR). Ukr. Khim. Zh. (Russ. Ed.), 38(6), 602-5 (Russian) 1972. CODEN: UKZHAU.

AB 2,6-Dichloropurine was treated with cyclohexyl-, admantyl-, and benzylamines, and with morpholine, p-toluidine, and p-nitroaniline to replace the Cl atom in position 2. By use of more amine, disubstituted compds. were obtained using morpholine, benzylamine, and p-toluidine. The Cl atom of 6-chloro-2-benzylaminopurine was replaced by p-XC6H4NH (X = Me, NO2) and the Cl of 6-chloro-2-cyclohexylaminopurine was replaced with p-O2NC6H4NH. These compds. were prepd. as substances with possible cytokinin activity.

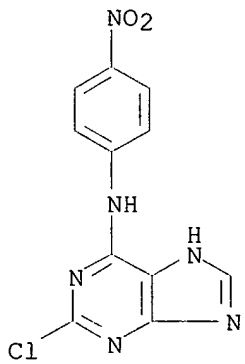
L6 ANSWER 35 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 39639-51-5 REGISTRY
CN 1H-Purine-2,6-diamine, N2-cyclohexyl-N6-(4-nitrophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H19 N7 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 78:16123 Synthesis and study of 2,6-diaminopurines.
Tret'yakova, G. S.; Nedel'kina, N. N.; Cherkasov, V. M. (Inst. Org. Khim.,
Kiev, USSR). Ukr. Khim. Zh. (Russ. Ed.), 38(6), 602-5 (Russian) 1972.
CODEN: UKZHAU.
AB 2,6-Dichloropurine was treated with cyclohexyl-, admantyl-, and benzylamines, and with morpholine, p-toluidine, and p-nitroaniline to replace the Cl atom in position 2. By use of more amine, disubstituted compds. were obtained using morpholine, benzylamine, and p-toluidine. The Cl atom of 6-chloro-2-benzylaminopurine was replaced by p-XC6H4NH (X = Me, NO2) and the Cl of 6-chloro-2-cyclohexylaminopurine was replaced with p-O2NC6H4NH. These compds. were prepd. as substances with possible cytokinin activity.

L6 ANSWER 36 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 39639-50-4 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(4-nitrophenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H7 Cl N6 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

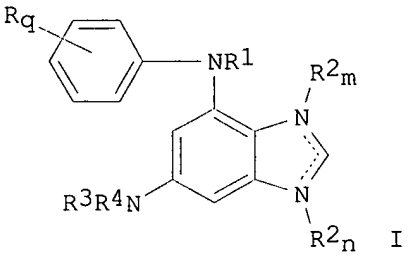


2 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 127:34237 Preparation of purine derivatives. Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal (Novartis Ag, Switz.; Zimmermann, Juerg; Capraro, Hans-Georg; Peterli, Patricia; Furet, Pascal). PCT Int. Appl. WO 9716452 A1 19970509, 97 pp. DESIGNATED STATES: W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1996-EP4573 19961022. PRIORITY: CH 1995-3094 19951101; CH 1996-2213 19960910.

GI



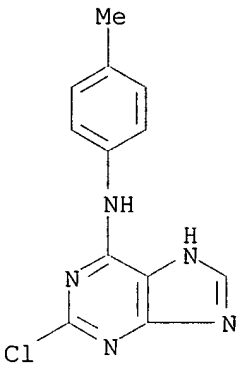
I

AB 2-Amino-6-anilino-purine derivs. I (R = halo, alkyl, HO, alkanoyloxy, alkoxy, substituted alkoxy, carboxyl, alkoxycarbonyl, carbamoyl, amino, aminosulfonyl, F3C; R1 = H, carbamoyl, alkylcarbamoyl; R2 = alkyl, Ph, substituted Ph; R3 = H, amino, phenylamino, alkylamino, HO, phenoxy, alkoxy, acyl, carbocyclic radical, or heterocyclic radical; R4 = amino, OH, phenoxy, alkoxy, acyl, substituted hydrocarbon radical, carbocyclic radical, or heterocyclic radical; R3R4 may form a ring; m and n are 0, 1; q = 1-5) were prepd. These compds. inhibit p34cdc2/cyclin Bcdc13 kinase and can be used for treatment of hyperproliferative diseases, for example tumor diseases (no data). Thus, 2-chloro-6-(3-chlorophenylamino)-9-ethyl-9H-purine, prepd. in two steps from 3-chloroaniline and 2,6-dichloropurine, was treated with ethylenediamine to give 2-(2-aminoethylamino)-6-(3-chlorophenylamino)-9-ethyl-9H-purine.

REFERENCE 2: 78:16123 Synthesis and study of 2,6-diaminopurines. Tret'yakova, G. S.; Nedel'kina, N. N.; Cherkasov, V. M. (Inst. Org. Khim., Kiev, USSR). Ukr. Khim. Zh. (Russ. Ed.), 38(6), 602-5 (Russian) 1972. CODEN: UKZHAU.

AB 2,6-Dichloropurine was treated with cyclohexyl-, admantyl-, and benzylamines, and with morpholine, p-toluidine, and p-nitroaniline to replace the Cl atom in position 2. By use of more amine, disubstituted compds. were obtained using morpholine, benzylamine, and p-toluidine. The Cl atom of 6-chloro-2-benzylaminopurine was replaced by p-XC6H4NH (X = Me, NO2) and the Cl of 6-chloro-2-cyclohexylaminopurine was replaced with p-O2NC6H4NH. These compds. were prepd. as substances with possible cytokinin activity.

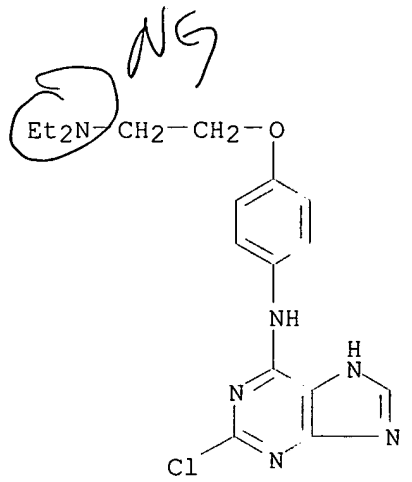
L6 ANSWER 37 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 39639-49-1 REGISTRY
CN 1H-Purin-6-amine, 2-chloro-N-(4-methylphenyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H10 Cl N5
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 78:16123 Synthesis and study of 2,6-diaminopurines.
Tret'yakova, G. S.; Nedel'kina, N. N.; Cherkasov, V. M. (Inst. Org. Khim.,
Kiev, USSR). Ukr. Khim. Zh. (Russ. Ed.), 38(6), 602-5 (Russian) 1972.
CODEN: UKZHAU.
AB 2,6-Dichloropurine was treated with cyclohexyl-, admantyl-, and benzylamines, and with morpholine, p-toluidine, and p-nitroaniline to replace the Cl atom in position 2. By use of more amine, disubstituted compds. were obtained using morpholine, benzylamine, and p-toluidine. The Cl atom of 6-chloro-2-benzylaminopurine was replaced by p-XC6H4NH (X = Me, NO2) and the Cl of 6-chloro-2-cyclohexylaminopurine was replaced with p-O2NC6H4NH. These compds. were prepd. as substances with possible cytokinin activity.

L6 ANSWER 38 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 16124-77-9 REGISTRY
CN Purine, 2-chloro-6-[.beta.-(diethylamino)-p-phenetidino]- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H21 Cl N6 O
LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXLIT
(*File contains numerically searchable property data)



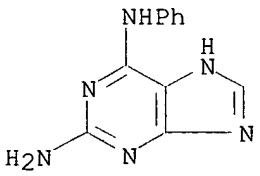
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 67:99762 Nonsteroidal hypocholesteremic agents. I. Synthesis and serum sterol lowering properties of substituted 4-(2-dialkylaminoethoxy)diphenylamines and related compounds. Bach, Frederick L., Jr.; Barclay, John C.; Cohen, Elliott (American Cyanamid Co., Pearl River, N. Y., USA). J. Med. Chem., 10(5), 802-6 (English) 1967. CODEN: JMCMAR.

GI For diagram(s), see printed CA Issue.

AB The prepn. and serum sterol lowering properties of a series of 4,4'-disubstituted diphenylamines and related compds., e.g. I, are discussed. Initial screening data indicate that several of these compds., synthesized by conventional means, possess oral activity greater than most nonsteroidal hypocholesteremic agents reported to date.

L6 ANSWER 39 OF 39 REGISTRY COPYRIGHT 2000 ACS
RN 14051-72-0 REGISTRY
CN 1H-Purine-2,6-diamine, N6-phenyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Purine, 2-amino-6-anilino- (6CI, 8CI)
OTHER NAMES:
CN 2-Amino-6-(phenylamino)purine
CN 2-Amino-6-anilinopurine
FS 3D CONCORD
MF C11 H10 N6
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

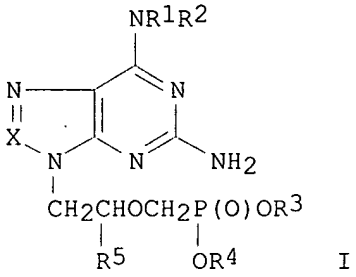


6 REFERENCES IN FILE CA (1967 TO DATE)
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 126:131752 Preparation of phosphonate acyclic nucleotide

derivatives as antiviral agents. Ubasawa, Masaru; Takashima, Hideaki; Sekiya, Kouichi; Inoue, Naoko; Yuasa, Satoshi; Kamiya, Naohiro (Mistubishi Chemical Corporation, Japan; Ubasawa, Masaru; Takashima, Hideaki; Sekiya, Kouichi; Inoue, Naoko; Yuasa, Satoshi; Kamiya, Naohiro). PCT Int. Appl. WO 9700262 A1 19970103, 58 pp. DESIGNATED STATES: W: CA, CN, JP, KR, US; RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1996-JP1631 19960614. PRIORITY: JP 1995-149014 19950615.

GI



I

AB Compds. represented by general formula (I; R1 = H, C1-6 alkyl or C7-10 aralkyl; R2 = C1-6 alkyl, C7-10 aralkyl or phenyl; R3, R4 = H, C1-6 alkyl, acyloxymethyl, acylthioethyl, Et substituted by at least one halogen atom; R5 = H, C1-4 alkyl, C1-4 hydroxyalkyl, C1-4 alkyl substituted by at least one halogen atom; X = C or N), which show antiviral activity with high oral absorbability, are prepd. Thus, 2-amino-6-(dimethylamino)purine was suspended in DMSO and reacted with 1,8-diazabicyclo[5.4.0]undec-7-ene at 100.degree. for 1 h, followed by adding 2-[bis(2,2,2-trifluoroethyl)phosphonylmethoxy]ethyl iodide, and the resulting mixt. was allowed to react at 100.degree. for 2 h to give 12% 2,6-diamino-9-[(phosphonomethoxy)ethyl]purine I (R1 = R2 = Me, R3 = R4 = CF3CH2, R5 = H, X = C). This compd. in vitro inhibited 92 and 100% at 1 and 100 .mu.M, resp., the synthesis of DNA synthesis of hepatitis B virus in HB611 cells and showed 50% cell toxicity for HB611 cell at >1,000 .mu.M.

REFERENCE 2: 120:217083 The mass spectrometry of 2-amino-6-arylaminopurines.
Yakout, E. M. A. (Dep. Pesticide Chem., Natl. Res. Cent., Cairo, Egypt). Bull. Natl. Res. Cent. (Egypt), 18(1), 11-17 (English) 1993. CODEN: BNRCET.
AB Principal modes of fragmentation of the title spectra under electron impact were detd.

REFERENCE 3: 120:29465 Preparation of (2',3'-dideoxy-3'-.beta.-D-erythropentofuranosyl)-9H-purines as antiviral nucleosides. Burns, Charlene Louise; Koszalka, George Walter; Krenitsky, Thomas Anthony (Wellcome Foundation Ltd., UK). PCT Int. Appl. WO 9314103 A1 19930722, 94 pp. DESIGNATED STATES: RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1993-GB4 19930105. PRIORITY:

GB 1992-149 19920106; GB 1992-20317 19920925.

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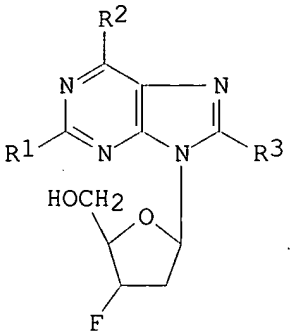

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AB Title compds. I [R1 = H, amino, halo; R2 = halo; NR4R5, R4, R5 = H, C1-4 hydroxyalkyl, C1-6 alkyl, C3-6 cycloalkyl, C2-6 alkenyl, C6-10 aryl, (un)substituted C6-10arylC1-3alkyl, etc.; R6O(Ar)(CH2)n (R6 = C1-6 alkyl, Ar = C6-10 aryl, n = 0-3); R4R5 = N of a 3 to 7-membered heterocyclic ring optionally contg. 1 or more other hetero atoms selected from O, N, S; S(O)nR7, n = 0-2, R7 = C1-6 alkyl, C3-6 cycloalkyl, etc.; OR8, R8 = H, C1-6 alkyl, C3-6 cycloalkyl, etc.; R3 = H, amino, halo, C1-6 alkyl with proviso] were prepd. as antiviral nucleosides. Thus, 2-amino-6-dimethylamino-9H-purine and 2',3'-dideoxy-3'-fluorouridine were suspended in a potassium phosphate buffer contg. potassium azide and treated with purine nucleoside phosphorylase and thymidine phosphorylase immobilized on DEAE cellulose to give 26% I (R1 = NH2, R2 = Me2N, R3 = H) (II). II showed an IC50 = 8.mu.M against HIV in MT4 cells. Various formulations for I are also reported.

REFERENCE 4: 110:172972 Phosphorus pentoxide in organic synthesis. XXXVII. Synthesis of 2-amino-6-arylaminopurines. Yakout, El Sayed M. A.; Soe, Henrik M.; Pedersen, Erik B. (Dep. Chem., Odense Univ., Odense, DK-5230, Den.). Acta Chem. Scand., Ser. B, B42(4), 257-8 (English) 1988. CODEN: ACBOCV. ISSN: 0302-4369.

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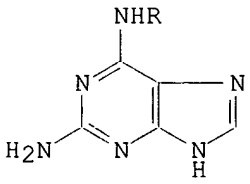

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AB Aminopurines I (R = Ph, substituted Ph) were obtained in 45-90% yield by heating guanine with RNH2.HCl in the presence of P2O5 and Et3N.HCl.

REFERENCE 5: 107:31115 Silver halide photographic material. Sakamoto, Hidekazu; Kaneko, Yutaka (Konishiroku Photo Industry Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 61256346 A2 19861113 Showa, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1985-99251 19850510.

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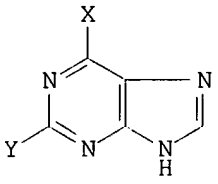

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AB A Ag halide photog. material contains .gtoreq.1 pyrimidoimidazole deriv. of the formula I [X = NR1R2, NHCZR3, NHSO2R4 (R1, R2 = H, alkyl, aryl; R3 = alkyl, aryl, amino; R4 = alkyl, aryl; Z = O, S); Y = H, OH, NH2] as a fog inhibitor. Fog formation is suppressed even on extended storage.

REFERENCE 6: 67:73588 Irreversible enzyme inhibitors. XCII. Inhibition of xanthine oxidase by some purines and pyrimidines. Baker, Bernard Randall;
Hendrickson, J. L. (Univ. of California, Santa Barbara, CA, USA). J. Pharm. Sci., 56(8), 955-9 (English) 1967. CODEN: JPMSAE.

AB Twenty-six compds. were investigated as inhibitors of xanthine oxidase, the enxyme that can also detoxify 6-mercaptopurine; these compds. consisted of 19 purines, 4 pyrimidines, 2 8-azapurines, and 1 imidazole. Among the inhibitors that complexed to xanthine oxidase as well or better than the substrate, hypoxanthine, were thioguanine, adenine, and 6,8-dihydroxy-2-methylthiopurine (I). The larger 2-benzylthio-6,8-dihydroxypurine (II) was synthesized and inhibited equally as well as I. 2-Benzylthiohypoxanthine (III) and 8-benzylthiohypoxanthine (IV) were synthesized; these compds. complexed 11-fold and 2-fold better, resp., to the enzyme than did the substrate. Thus, the enzyme showed bulk tolerance for the benzylthio group of II-IV; the benzylthio group is a local group for placement of electrophilic groups to give candidate active-site-directed irreversible inhibitors of xanthine oxidase. 33 references.

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TI potential purine antagonists - (XIX) synthesis of some 9-alkyl(aryl)-2-amino-6-substituted purines and related v-triazolo[d]pyrimidines
AU Koppel, Henry C.; O'Brien, D. E.; Robins, R. K.
IT 2239-25-0 2879-14-3 5444-47-3 5472-85-5 6318-28-1 7780-34-9
14051-72-0 14443-33-5 14443-34-6 14937-64-5 14937-71-4
14937-72-5 14937-73-6 14937-74-7 15065-50-6 17419-08-8 17756-35-3
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